To: Vann, Bradley[Vann.Bradley@epa.gov]

Cc: Smith, Mark A.[Smith.Marka@epa.gov]; Werner, Leslye[Werner.Leslye@epa.gov]; Tapp,

Joshua[Tapp.Joshua@epa.gov]; Doolan, Stephanie[Doolan.Stephanie@epa.gov]

From: Bertram, Gary

Sent: Tue 5/19/2015 9:19:10 PM **Subject:** RE: CAG Question from April

Brad – Sorry for the slow response. It's been "one of those days".

Regarding current emissions from the Bridgeton landfill flares...we don't know. There have been no performance/emission tests of the flares conducted. Therefore, we don't have data on chemical constituents in Bridgeton flare emissions. It would not be current information, but I can request a copy of Bridgeton's most recent EIQ (Emission Inventory Questionnaire) from MDNR if you like. The EIQ would show the emissions that Bridgeton reported to MDNR.

Stephanie – Do you have any thoughts on this issue?

Take Care,

Gary Bertram

U.S. EPA - Region 7

11201 Renner Blvd

Lenexa, KS 66219

913-551-7533

From: Vann, Bradley

Sent: Tuesday, May 19, 2015 9:26 AM

To: Bertram, Gary

Cc: Smith, Mark A.; Werner, Leslye; Tapp, Joshua; Doolan, Stephanie

Subject: RE: CAG Question from April

Gary,

Just following up on this item. I understand the program nor MDNR does not have a complete answer to this issue yet. Can your folks put together a response (general or other) to the CAG's March question that I can send them? They know EPA is working with MDNR on this very issue, but they are confused to exactly what we are doing, which isn't good as they start filling in the void of information with speculation. Anything I can send them at this point would be helpful. Naturally we can run it past CNSL and OPA will all other comments SF is working on before sending out.

Thanks,

Bradley Vann - Remedial Project Manager

U.S. Environmental Protection Agency

Superfund Division

Missouri/Kansas Remedial Branch

11201 Renner Blvd.

Lenexa, KS 66219

Phone: 913-551-7611

Fax: 913-551-9611

Cell: 816-714-0331

From: Bertram, Gary

Sent: Friday, April 24, 2015 1:48 PM

To: Vann, Bradley

Cc: Smith, Mark A.; Werner, Leslye Subject: RE: CAG Question from April

Brad – I wish I had something of substance to share. I can look up info on typical landfill emissions, but I don't think this would be considered typical. We've been trying to figure out how to accurately measure the constituents in flare emissions...and a mechanism to legally require the test. As funny as it may sound, testing the flares may require the fabrication of a "temporary stack" so the emissions can be measured. We're still discussing the pros and cons of doing this. But, we don't have (to the best of my knowledge) actual emission data from the flares at this site. (but we really want to know...)

Sorry I couldn't be of much assistance. If you want me to dig up something generic, just let me know and I'll see what I can do for you Monday before you leave. (I'm only on the clock until 2:00 today) I don't think it would be anything that would satisfy the public (since it would probably list CO2 and H20 as the primary constituents and CO, SOx, NOx, and trace materials in much smaller quantities. (Landfill gas is typically around 50% methane and 50% CO2...give or take, depending on the landfill age and contents)

Please let me know if I may be of assistance before you leave on Monday.

Take Care,

Gary Bertram

U.S. EPA - Region 7

11201 Renner Blvd

Lenexa, KS 66219

913-551-7533

From: Vann, Bradley

Sent: Friday, April 24, 2015 1:35 PM

To: Bertram, Gary

Cc: Doolan, Stephanie; Stoy, Alyse; Washburn, Ben; Smith, Mark A.; Werner, Leslye

Subject: RE: CAG Question from April

Gary, I understand there may not a be a clear answer (yet) for this issue as it is still evolving as we discuss it internally. Just want to be sure our answer to the public's question is consistent with what has been stated by EPA to date and as accurate as possible. It may simply be the case that we cannot answer the question until the additional information/data is collected by the RP through the state's enforcement. Again, I certainly can't speak to anything at this point and was looking to see if any such responses have been considered to date.

Thanks,

Bradley Vann - Remedial Project Manager

U.S. Environmental Protection Agency

Superfund Division

Missouri/Kansas Remedial Branch

11201 Renner Blvd.

Lenexa, KS 66219

Phone: 913-551-7611

Fax: 913-551-9611

Cell: 816-714-0331

From: Bertram, Gary

Sent: Friday, April 24, 2015 1:11 PM

To: Vann, Bradley

Cc: Doolan, Stephanie; Stoy, Alyse; Washburn, Ben; Smith, Mark A.; Werner, Leslye

Subject: RE: CAG Question from April

Brad – I don't think I have much for you to work with. We have been looking at flare inlet data, so we have a feel for the constituents in the gas. But, I'm not finding data on post combustion. We had our hopes up when one of the flare construction permits required a performance test. However, we were informed by St. Louis County that the performance test was never conducted. We've had some internal discussions regarding possible ways in which an emissions test could be run on a candlestick flare, but that's as far was we've gotten. We are also interested in knowing the constituents coming off the flares.

I'm not sure what air emissions report is being referenced. If they are referencing Bridgeton's Emission Inventory Questionnaire (EIQ), then the emissions are calculations, typically using AP-42 emission factors and may not be determined by analysis of measured emissions from the flare.

I'll double check the info we've received and will give you a yell if I trip across anything that may be helpful.

Take Care,

Gary Bertram

U.S. EPA - Region 7

11201 Renner Blvd

Lenexa, KS 66219

913-551-7533

From: Vann, Bradley

Sent: Friday, April 24, 2015 12:49 PM

To: Bertram, Gary

Cc: Doolan, Stephanie; Stoy, Alyse; Washburn, Ben

Subject: CAG Question from April

Gary,

I know you and others from the air program have been working on this very issues with MDNR. SF received this question from the community group and was hoping you or someone in air can provide us with a response that we can pass along. Note I am traveling up to meet with the CAG Monday evening but if that is too short of fuse to answer, we will omit this question from the others (that area SF issues) and Ben and I will tell them we are working on it. Note the TASC response from Terrie Boguski is a SF grantee that assist the community with technical issues and understanding (just in case you don't already know). She has been looking on the communities behalf at the MDNR information that publicly available. Thanks.

- 1) What substances/chemicals are currently being emitted from the gas flares?
- a. *TASC*: TASC received the 2013 Bridgeton Landfill air emissions report from MDNR is waiting to hear if additional information is available from MDNR. Terrie summarized and shared the 2013 report with the CAG technical committee.

EPA Response: ????

Bradley Vann - Remedial Project Manager

U.S. Environmental Protection Agency

Superfund Division

Missouri/Kansas Remedial Branch

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